

REMARKSStatus Summary

In this Amendment, no claims are added and no claims are canceled. Therefore, upon entry of this Amendment, claims 22-39 will remain pending.

Examiner Interview Summary

Applicants conducted an in-person interview with Examiner Elahee and Examiner Hussein on August 16, 2004. In the interview, the rejections under 35 U.S.C. § 112, first paragraph were first discussed. In particular, Examiner Elahee requested that claims 22 and 34 be amended to indicate that the call server modules store call state and connection status information regarding calls in progress in the media gateway. Claims 22 and 34 have been amended as requested. Accordingly, it is respectfully submitted that the rejection of these claims under 35 U.S.C. § 112, first paragraph, should be withdrawn. With regard to claim 34, Applicants indicated that the specification includes language that supports this claim. In particular, Applicants directed the Examiners attention to page 22 beginning at line 22 of the present specification. The relevant portion of the specification is as follows:

As used herein, the terms "modules" or "cards" refer to printed circuit boards that are removably connectable to IMT bus 207 and that are physically housed in shelves, such as shelves 301 and 302. (See page 12, lines 22-24 of the present specification.)

Since the term "module" is defined in the specification to mean "printed circuit board" and is used to describe both the link interface and call server functionality, it is respectfully submitted that the specification provides support for the claim limitation that

the modules comprise printed circuit boards. Accordingly, it is respectfully requested that the rejection of claim 34 as unsupported by the specification under 35 U.S.C. § 112, first paragraph, be withdrawn.

With regard to the prior art rejections of the claims, Applicants first indicated that it would not be obvious to combine the disclosures of Chong and Denman because there is no motivation in either of these references or in the knowledge of a person of ordinary skill in the art for combining these references. Chong relates to a database end node in an AIN network that terminates queries and formulates responses. Denman is related to a method for providing voice-over-IP telephony. There is no motivation for modifying the call servers of Chong to provide a media gateway controller as taught by Denman.

Applicants also noted that even if Chong and Denman are combined, the combination fails to teach or suggest "storing connection status and call state information regarding calls in progress through a media gateway." Chong indicates that call state information is discarded when a call is completed. Denman does not disclose the information stored in its media gateway controller.

With regard to the rejection of claim 28 based on Chong in view of Denman and further in view of Haruta, Applicants noted that Haruta relates to call centers, rather than call server modules that manage media gateways. The state table reference in paragraph [0099] of Haruta relates to the number of calls queued by an automatic call distribution group.

Agreement was not reached in the in-person Interview. The Examiners requested a new interview to be conducted by telephone on Tuesday, August 24, 2004.

Summary of Telephone Examiner Interview

[TO BE FILLED IN UPON COMPLETION OF TELEPHONE EXAMINER  
INTERVIEW]

Claim Rejections 35 U.S.C. § 103

Claims 22-27 and 29-39 are rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,205,557 to Chong et al. (hereinafter, "Chong") in view of U.S. Patent No. 6,205,557 to Denman et al. (hereinafter, "Denman"). This rejection is respectfully traversed.

The present invention, for example as claimed in independent claims 22 and 29, includes a scalable call processing node and a method for call server module switchover in a scalable call processing node in response to a call server failure. In particular, in claim 22, a scalable call processing node includes a link interface module and first and second call server modules. The link interface module identifies SS7 signaling messages as a requiring processing by a call server and selects a call server for processing the messages. One call server module functions as a primary call server that stores connection status and call state information regarding calls in progress in the media gateway and performs media gateway call management functions for establishing the call in the media gateway. The second call server module stores connection status and call state information regarding calls in progress through the media gateway and functions as a backup call server. The second call server switches operation to become the primary call server in response to failure of the first call server. Examples of the call state and the connection status information regarding calls in

progress in the media gateway that is stored in the backup call server includes the call state information illustrated in state table 705 and the connection status information illustrated in endpoint table 703. Because such information is stored on both the primary and secondary call servers, sub-second switchover can occur when the primary call server fails.

In paragraph 6, the Official Action states:

However, Chong fails to teach "selecting a media gateway through which a call associated with the call signaling message will be routed and for performing media gateway call management functions for establishing the call in the media gateway". Denman teaches selecting a media gateway through which a call associated with the call signaling message will be routed and for performing media gateway call management functions for establishing the call in the media gateway (abstract; col. 7, lines 38-42, col. 15, lines 23-35.) Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chong to allow selecting a media gateway through which a call associated with the call signaling message will be routed and for performing media gateway call management functions for establishing the call in the media gateway in order to function as a media gateway controller to route the call. (Emphasis added.) (See paragraph 6 of Official Action dated February 27, 2004.)

From this passage, the Official Action indicates that even though Chong fails to disclose a call server that selects a media gateway or performs media gateway management functions, it would be obvious to modify Chong to provide such functions in order to provide a media gateway controller. However, there is no motivation in Chong or Denman for modifying the call server of Chong to provide a media gateway controller as taught by Denman. Database nodes 103 and 104 illustrated in Figure 2 of Chong each include an active call server 140 and a standby call server 141, as illustrated in Figure 3. Call servers 140 and 141 are components of a database 103. (See Figure 3 of

Chong.) According to Chong, "the database 103 evaluates the call information and returns instructions via signaling network 102 to the switch 101 to complete the call connection." (See column 2, lines 47-49 of Chong.) Thus, from this passage and Figure 3, rather than teaching a media gateway controller, Chong teaches that database 103, of which active and standby call servers 140 and 141 are a part, terminates queries and responses to the queries. In contrast, a media gateway controller receives call setup commands from end offices and formulates corresponding media gateway control commands. Thus, there is nothing in Chong that suggests modifying databases 103 and 104 to provide media gateway controller functionality.

Moreover, there is nothing in Denman to suggest modifying database nodes that terminate and respond to queries to provide media gateway controller functionality. Denman is directed to a method for providing packet-switched telephony. According to Denman, a call server 214 functions as a media gateway controller for a PSTN trunking media gateway and a wireless mobility server. (See Abstract of Denman.) However, there is absolutely no teaching or suggestion of modifying a database node as taught by Chong to provide media gateway controller functionality. Chong and Denman use the term "call server" to mean very different things. In Chong, "call server" means "database node that terminates queries and provides responses." In Denman, "call server" means "node that functions as a media gateway controller."

As the Federal Circuit has repeatedly stated, an obviousness rejection "cannot be established by combining the teaching of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." (See *In re Fine* 5 U.S.P.Q.2d 1596, 1599 (Fed. Cir. 1988) (quoting *In re Keller*, 642 F.2d 413, 525,

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208 U.S.P.Q. 871, 881 (CCPA 1981)). Since there is no teaching or suggestion in Chong or Denman to modify the database end node of Chong to provide a media gateway controller, it is respectfully submitted that the rejection of the claims as unpatentable over Chong in view of Denman should be withdrawn for this reason alone.

Even assuming for the sake of argument that it would be obvious to combine the disclosures of Chong and Denman, the combined disclosures of Chong and Denman fail to teach or suggest providing first and second call servers wherein the second call server stores connection status and call state information regarding calls in progress through the media gateway. According to Chong, both standby call server 140 and active call server 141 discard information once a call is connected. For example, Chong states:

The query processor 170 determines that the connection is established by means of its internal logic or by means of a message received by the active call server from the switch 101. The query processor 170 then deletes the call information from the register 190 and sends a message to the standby call server to also delete the call information for that call. In the example of a simple call, the query processor 170 deletes the call information when the call connection is completed. Because the call information was not copied to backup call server 141, the query processor does not send a delete message to the backup call server 141. (See column 4, lines 41-52 of Chong.)

From the passage above, Chong discloses that for a complex call, both the active and standby call servers delete all information related to the call when the call is connected. For simple calls, the primary call server deletes the call information when the call is connected and the backup call server does not store the call information. Accordingly, because Chong teaches that call state information is deleted when a call is connected,

Chong teaches away from storing connection status and call state information regarding calls in progress through the media gateway as claimed.

Denman likewise fails to teach or even remotely suggest storing, in a backup call server, connection status or call state information regarding calls in progress in the media gateway. According to Denman, call server 214 performs media gateway controller functions for PTMG 225 and WMS 216. (See Abstract of Denman.) However, there is absolutely no teaching or suggestion of a backup call server, not to mention a backup call server that stores call state and connection status information regarding calls in progress in a media gateway. Accordingly, because Chong and Denman fail to teach or even remotely suggest the claimed invention, it is respectfully submitted that the rejection of claims 22 and 34 and their respective dependent claims should be withdrawn.

Claim 28 was rejected as unpatentable over Chong in view of Denman and further in view of U.S. Patent Publication No. US 2002/0057782 to Haruta (hereinafter, "Haruta"). This rejection is respectfully traversed.

Claim 28 depends from claim 22. As stated above, Chong fails to teach or even remotely suggest a scalable call processing node where a first call server module functions as a primary call server module and a secondary call server module stores connection status and call state information regarding calls in progress through the media gateway. Haruta likewise lacks such teaching or suggestion. Haruta is directed to call center and is not even related to media gateway management. (See paragraph [0000] of Haruta.) The state table referenced in paragraph [0099], on page 5 of Haruta relates to the number of calls queued by an automatic call distribution group. (See

paragraph [0101] of Haruta.) There is absolutely no teaching or suggestion that the state information includes call state or connection status information regarding calls in progress in a media gateway. Accordingly, it is respectfully requested that the rejection of claim 28 be withdrawn.

CONCLUSION

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. 50-0426.

Respectfully submitted,

JENKINS, WILSON & TAYLOR, P.A.

Date: August 24, 2004

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Enclosure

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